

智能水肥一体化灌溉控制系统

Water and fertilizer integration

水肥一体机 Water and Fertilizer integration Machine

借助水路压力系统，将可溶性固体或液体肥料加入肥料罐，通过施肥机自动配比然后均匀、定时、定量随水施肥。

Soluble solid or liquid fertilizers are added into the fertilizer pot by means of water pressure system. The fertilizer is automatically proportioned by the fertilizer applicator and then applied evenly, regularly and quantitatively with water.



气象站系统 Meteorological Station System

可配置土壤水分、土壤温度、空气温湿度、光照强度、降雨量、风速风向等17种气象参数。

It can configure 17 meteorological parameters, such as soil moisture, soil temperature, air temperature and humidity, light intensity, rainfall, wind speed and direction.



物联网系统 Internet of Things System

采集大棚内关键气候信息：温度、湿度、光照、CO₂浓度、土壤温度、土壤湿度传感器模组；扩展输入模组；系统软件；控制大棚内外遮阳，水帘，卷帘，侧窗，风机循环等多种操作设备。与中央控制计算机数据交互。

Collect the key climate information in the greenhouse: temperature, humidity, light, CO₂ concentration, soil temperature, soil moisture sensor module; expand input module system software; control the shade inside and outside the greenhouse, water curtain, rolling curtain, side window, fan circulation and other operating equipment. Interaction with central control computer data.



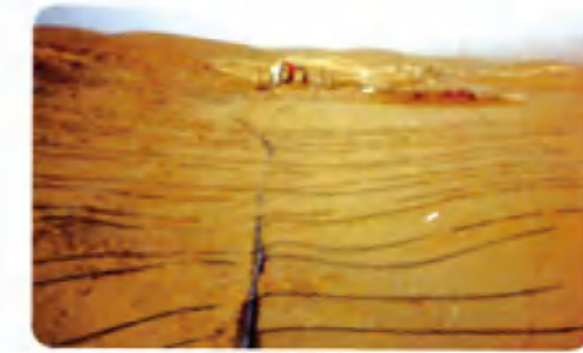
系统结构图

System structure

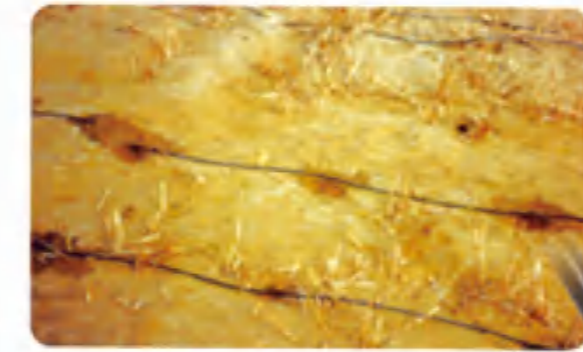
河水库水灌溉系统首部
river irrigation system



滴灌管(带)
drip pipe(tape)



沙漠公路防护林滴灌(压力补偿式滴头)
desert forest drip irrigation (pressure compensating emitter)



无电源条件下供水
irrigation without electricity power



柴油机
diesel engine
离心泵
centrifugal pump

输水渠
water channel



花卉微喷
flowers micro sprinkler



井水灌溉系统首部
well water irrigation system



大田喷灌
field sprinkler

分支管
branch pipe

供水出地管
branch pipe upground

供水地下干管
main pipe underground



果树小管出流
adjustable dripper



主管地埋
main pipe underground

Drip irrigation

内镶圆柱式滴灌管 Cylindrical Dripline pipe

产品介绍 Introduction

滴灌管是滴灌灌溉系统中的重要灌溉方式之一，其按照作物需水要求，通过低压管道系统与安装在毛管上的灌水器，将作物需要的养分均匀而又缓慢的滴入作物根系土壤中，滴灌灌溉不会破坏土壤结构。

Drip pipe is an important method in irrigation. According to the requirement of the crops, the water and nutrition are gently and slowly dripped into the soil from the low pressure micro dripline. Dripline will not damage the soil structure.

产品特点 Product Features

1. 采用内镶迷宫式滴头，滴头与管内壁热熔形成封闭的流道，水流通过时呈紊流状态，出水均匀度 $\geq 85\%$ ；
2. 滴头生产选用高精度模具和进口原材料，双出水孔设计，可减少土壤中微小颗粒、作物根须进入滴头；自洁性能及抗堵塞能力强。
3. 滴灌管选用新型LDPE材料并加入抗老化剂和紫外线吸收剂，强度高、耐腐蚀、抗老化。
4. 滴灌管主要用于温室大棚和大田和蔬菜、果树、葡萄、花卉等经济作物，可节水50%，增产20%，省工50%，省肥50%以上。
5. 1.9L/h-2.8L/h两种流量可根据作物不同的需水量选择。
6. 0.5mm-1.0mm多种管壁厚度适应不同灌溉环境需要。

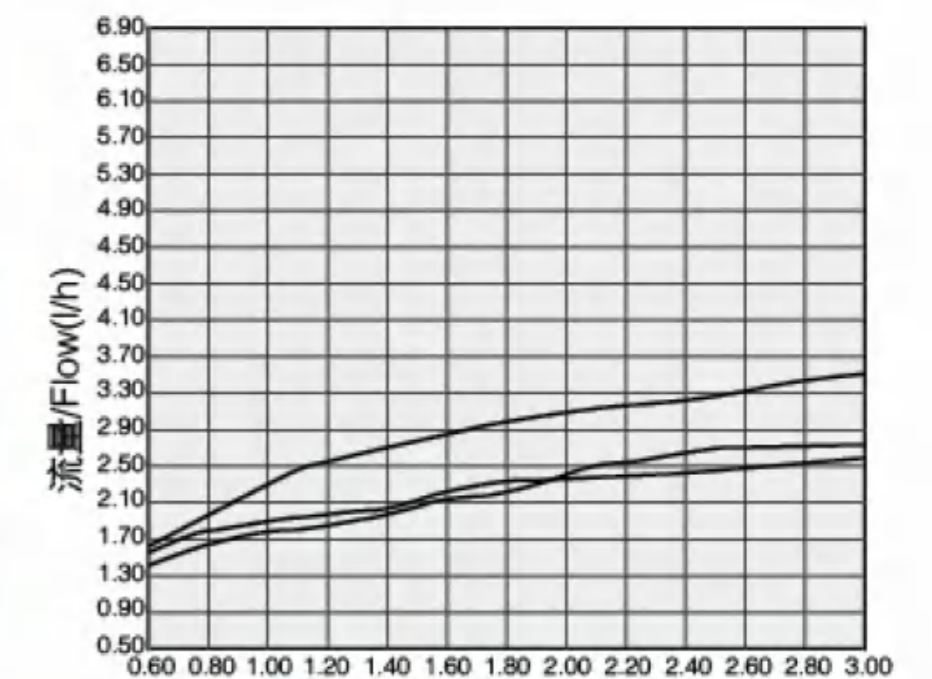
1. Equipped with labyrinth drip head, dripper and pipe closely connected forming a channel, stable flow state, uniformity $\geq 85\%$;
2. High quality mold and material for the drip head, double water hole design, reduce the particle in the soil, crop roots insert into the drip head; self cleaning, congestion proof.
3. Dripline is made by LDPE, aging and UV proof, rust proof and sustainable.
4. Can be applied to green house and vegetable, fruit, grape, flowers fields, save water 50%, enhance efficiency 20%, save time 50%, save fertilizer 50%+.
5. 1.9L/h-2.8L/h two type of flow rate could be adjusted for the different crops.
6. 0.5mm-1.0mm various thickness pipe line for different requirements.

技术参数 Technical Date

公称直径 nominal diameter (mm)	滴头间距 drip hole spacing (cm)	最大工作压力 max working pressure (KPa)	执行标准 (Technical standard)
16	20-50	3.0	GB/T17188-2001
20	20-50	3.0	GB/T17188-2001

技术参数 Technical Date

压力 Pressure (kpa)	流量 Flow			
	Φ 16		Φ 20	
	1.9L/H	2.8L/H	2.4L/H	3L/H
0.50	1.45	1.56	2.04	2.68
0.80	1.68	2.00	2.14	2.74
1.00	1.76	2.36	2.26	2.87
1.20	1.83	2.70	2.35	2.98
1.40	1.99	2.79	2.45	3.05
1.60	2.13	2.90	2.57	3.26
1.80	2.27	3.08	2.66	3.38
2.00	2.40	3.17	2.87	3.52
2.50	2.56	3.28	2.91	3.62
3.00	2.68	3.55	3.20	3.78



直径 Diameter	流量 Flow	水平地面铺设长度 (米) Dripline length on ground with zero slope		
		滴头间距 (米) Spacing		
		0.2	0.33	0.5
Φ 16	1.9	68	70	98
	2.8	59	62	87
Φ 20	2.4	128	150	150
	3	108	135	135



Drip irrigation

内镶贴片式滴灌带 Drip tape with inner flat emitter

产品介绍 Introduction

滴灌带是目前干旱缺水地区最有效的一种节水灌溉方式，其水的利用率可达95%。滴灌较喷灌具有更高的节水增产效果，同时可以结合施肥，提高肥效一倍以上。

Dripline tape is the one of the most effective equipment for the irrigation in the droust area,the utilization of the water could be as high as 95%.Dripline irrigation could save more water than spray irrigation,and when combined with fertilization,it could also enhance the efficiency of fertilizer by 50%.



产品应用 Application

用于棉花、甘蔗及蔬菜（如西红柿，黄瓜，草莓等）作物的灌溉，效果非常好。可高效地将水、肥输送到植物根部，满足植物生长的水、肥要求，达到高产，优质、高效。

Used for cotton,saccharum and vegetables,for instance, tomato,straw berry.Effectively transfer the water and fertilizer to the plant root,fullfill the crop's need for water and nutrition in order to achieve harvest,high quality and high efficiency.



产品特点 Characteristics

- 滴水均匀：滴头采用进口模具和进口原材料，科学合理的沟槽设计，保证滴头流量均匀稳定。
- 滴头不易堵塞：内镶贴片式滴灌带滴头有自过滤窗，抗堵性能好。
- 使用寿命长：原材料的合理配比及增加了抗老化添加剂，使产品抗老化的寿命大大延长。
- 滴头与管壁粘合紧密：滴头嵌在管道内，整体性好。
- 铺设距离长于内镶圆柱式滴灌管。
- 滴头间距可根据用户需要任意设置。
- Uniformity of drip:inner dripper is made by import mold and high class material,elegantly designed water channel guatanteed the stable and uniform flow rate,and the pipe line could build in a very long range.
- Congestion proof driphead:equipped with screen net,to prevent clogging.
- Long usage life:aging resistant material to prolong the service time.
- Drip head closely bonded with the pipe line: the drip head is embedded in the dripline to guarantee the performance.
- Can be build over a long distance.
- Adjustable driphead spacing.

技术参数 Technical Date

直径 Diamerer (mm)	流量 Flow (l/h)	EU(%) %	ΔQ±	水平地面铺设长度(米) Dripline length on ground with zero slope							
				滴头间距/spacing(m)							
				0.2	0.3	0.4	0.5	0.6	0.75	1.00	1.25
Φ16	1.38	85	3.5%	58	75	90	102	115	128	152	175
			5%	62	80	95	110	123	142	171	197
			7%	68	89	106	123	138	159	191	220
			10%	75	98	117	136	153	176	212	224
	2.0	85	3.5%	52	69	82	97	109	124	149	169
			5%	57	76	91	106	119	137	166	191
			7%	63	82	102	118	133	154	185	214
			10%	70	94	113	131	148	171	206	238
	2.7	85	3.5%	45	62	73	91	103	119	145	162
			5%	51	71	87	101	114	132	160	185
			7%	58	80	97	113	127	148	179	207
			10%	65	89	108	126	142	165	200	231

压力补偿式滴头 Pressure compensating emitter



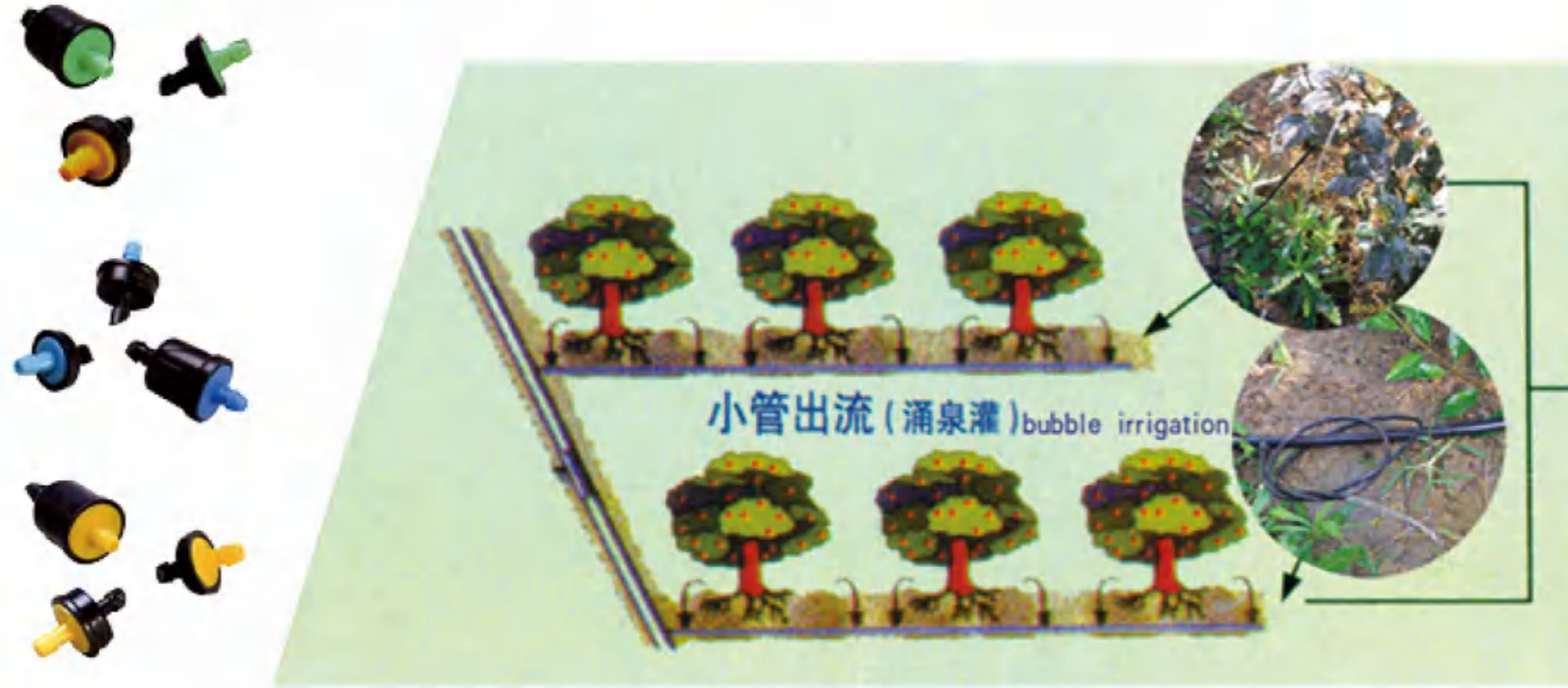
产品特点 Features

1. 具有压力补偿功能，新开发的硬质弹簧膜片在7米-60米水头下出水均匀，克服了传统的压力补偿式滴头起始流量大，高压不出水的缺陷。
2. 灌水均匀度高，灌水个体差异小。
3. 具有可拆洗功能，是所有滴灌类产品中抗堵性能最强的产品。
4. 适用于对设计要求不是太高，地形复杂适应能力强，铺设距离长。
5. 适用于果树、防护林及其他木本作物。
6. 主要有：4L/H、5L/H、8L/H。
 1. Silicon rubber diaphragm ensures consistent performance for longer period.
 2. Water drip steadily, make sure the water in every dripper flow with no difference.
 3. Self cleaning design ensures flushing at start up, shut down&during operation.
 4. Recommended for undulating terrain&sleep slopes.
 5. Recommended for orchards, fruit crops, vegetables, nurseries&flowers.
 6. Mainly: 4L / H, 5L / H, 8L / H.



Drip irrigation

稳流器 Adjustable drip emitters



小管出流所用的稳流器，具有超强的补偿特性，且流量大，从每小时4L-100L共20个品种可供用户选择。在果园、生态林、速生林建设中得到大量应用。所有的管道都埋于地下，只把出水毛管在地表树根部，防止老化和破坏，是滴灌类产品中使用年限最长，管理最省心的产品。

Adjustable drip emitter with strong pressure compensating ability and big flow rate, from 4L/h-100L/h for dozens specification to meet customers' demand. Widely used in orchard, ecological forest, fast-growing forest. All main pipe underground, only micro diameter pipe on the earth's surface near the roots of trees. It can be used for long time and is economical with time and effort.

技术参数 Technical Date

规格 specification (L/h)	毛管外径 capillary pipe outer diameter (mm)	毛管出水口间距 spacing of capillary pipe outlet			工作压力 working pressure	工作流量 flow rate
		2米 (m)	4米 (m)	6米 (m)		
		毛管长度 length of capillary pipe	毛管长度 length of capillary pipe	毛管长度 length of capillary pipe		
10	16	94	144	186	0.05MPa-0.35MPa	4L/h-60L/h (不同规格对应不同流量) (various flow rate correspond to different specifications)
	20	138	216	276		
	25	202	312	108		
20	16	60	96	120		
	20	88	136	180		
	25	130	200	264		
30	16	42	64	84		
	20	54	84	108		
	25	78	120	150		

Micro spray irrigation

倒挂微喷 Overhead nozzle models



产品特性 Features

- 倒挂时有悬锤保持喷头垂直向下，防止喷头方向发生变化。
 - 水流迅速，防止堵塞。
 - 水滴细密，分布均匀。
 - 配有止漏阀，避免系统开闭时产生滴水现象。
 - 锥形压入式接口，便于更换。
- Equipped with counterweight to assure the sprayer downwards.all the time and prevent the sprayer from changing the direction.
 - Quick flow and prevent the sprayer from clogging.
 - Fine and uniform water drop.
 - Equipped with anti-leaking valve,no water drop onto the earth after shutting down the system.
 - Conical push-through interfaces can be easily replaced.

微喷头系列 Micro nozzle series

Name	Connection size	Nozzle pressure (Kpa)	Flow rate L/H	Range M		Connection size	Nozzle pressure (Kpa)	Flow rate L/H	Range M
Refractive atomizing nozzle	6.0	0.15-0.35	35-50	1-1.5	Cross atomizing nozzle	6.0	0.15-0.35	50-90	1.5-2
Frame type rotating nozzle	6.0	0.15-0.35	75-150	3-4	Coolnet atomizing nozzle	6.0	0.15-0.35	40-90	1.2-2
Binnet nozzle	6.0	0.15-0.35	90-140	5-7	Lantern nozzle	6.0	0.15-0.35	100-150	2-6

产品用途 Usague

多用于温室内苗床和植物灌溉。
Used for irrigation of seedbed and crops in green house.



十字雾化喷头及防漏器组合
cross mist sprinker & anti-dripping valve



防漏器 压力: 0.15Mpa

防漏器的主要作用: 是在喷灌前或在喷灌终止后, 防止管道中的剩余水滴落到苗木及土壤中, 确保喷灌在有计划地控制范围内。

Anti-leakage valve
PRESSURE:0.15Mpa

To be used before and after spray,prevent the water remnant to be dropped into soil,guarantee the irrigation is under control.



M 微喷灌系列

Micro spray irrigation

地插微喷 Nozzle models insert the land

中距离微喷头系列

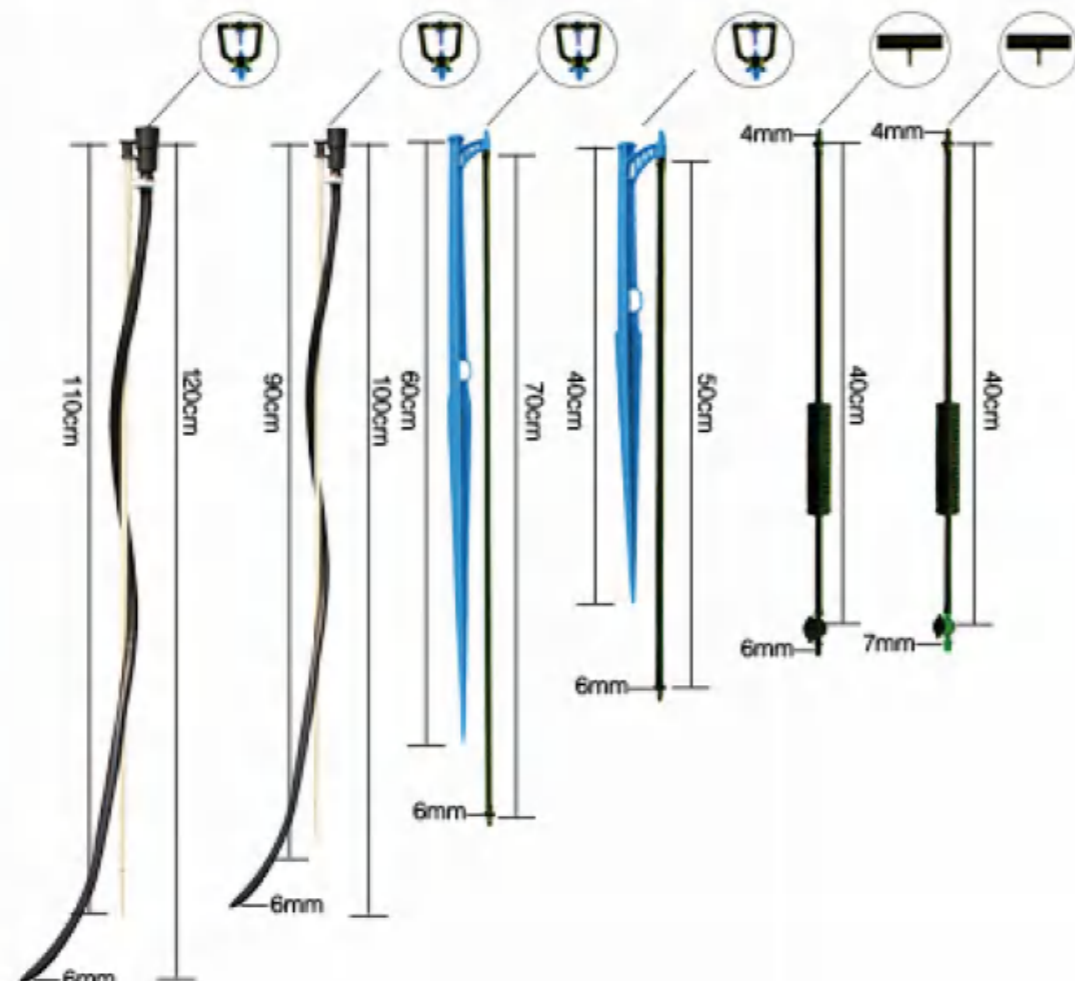
Name	Connection size	Nozzle pressure (Kpa)	Flow rate L/H	Range M		Connection size	Nozzle pressure (Kpa)	Flow rate L/H	Range M
Plastic desktop atomizing nozzle	4 external teeth	0.15-0.35	0.8-1.5	0.5-5.5	Rotating nozzle	1/2	0.15-0.35	0.5-1.2	3-6
Butterfly nozzle	1/2	0.15-0.35	0.5-1.2	3-6	Magnum nozzle	1/2	0.25-0.4	0.55-0.8	8-10
Turbine nozzle	1/2	0.15-0.35	0.5-1.2	3-6	Medium distance refracting nozzle	1/2	0.25-0.4	0.8-1.5	3-6

产品用途 Usage

- 用于草坪微灌、果树喷灌和庭院灌溉
- Used for landscaping irrigation, orchard and courtyard.

产品特性 Product Features

- 流道按涡流原理设计
- Flow designed based upon eddy current principle
- 水流迅速防止堵塞
- Quick flow and prevent sprayer from blocking
- 水滴细密分布均匀
- Fine and uniform water drop
- 启动压力小，流量稳定
- Low start-up pressure and stable flow
- 锥形压入式接口，便于更换
- Conical push-through interfaces can be easily replaced.



微喷带 Micro spray tape



产品介绍 Introduction

微喷带又称多孔管、喷水带、喷灌带、微喷灌管，是在可压扁的塑料软管上采用机械或激光直接加工出水小孔，进行滴灌或微喷灌的节水灌溉设备。将每组3个出水孔、5个出水孔或更多出水孔的微喷带直接铺设在地面，直射在空中的水流就能形成类似细雨的微喷灌效果。将每组单个出水孔或双出水孔的喷水带铺设在地膜下，水流在地膜的遮挡下就能形成滴灌效果。

1. It uses the laser perforation technology, round and exact. It can be use in micro jet or drip irrigation under mulch.
2. It sprays like the slight rain which does not hurts crops .Also it is suitable in many kinds of fruits, vegetables and flowers .
3. Anti-clogging, lower price, lower work hydraulic pressure , fewer invests, installation disassembly easily.
4. The spraying water is so soft and homogeneous, which prevent the soil from getting lost and stiff.
5. The water supply is suitable and there will be no water stay in the pipe.

规格 specification		壁厚 thickness	孔口间距 drip hole spacing	孔口形式 drip hole quantity/row	流量 flow rate	铺设长度 recommend length of laying pipe	喷洒宽幅 spray radius	标准件 packing size
折径mm folding size	直径(D:m) diameter	(mm)	(cm)		M ³ /h10m	m	m	米/卷 m/roll
40	Φ25	0.2	30	Diagonal five hole 5/row	1.0	40	2	200
50	Φ32 ^{+0.1}	0.3	30	Diagonal five hole 5/row	1.65	50	3	200
63	Φ40 ^{+0.1}	0.3	30	Diagonal five hole 5/row	1.65	80	4	200
80	Φ50 ^{+0.2}	0.3	50	Diagonal seven hole 7/row	1.4	100	5	150
100	Φ63 ^{+0.2}	0.3	50	Diagonal seven hole 7/row	1.4	150	6	150
120	Φ75 ^{+0.2}	0.3	80	Diagonal nine hole 9/row	1.6	100	6	100
140	Φ90 ^{+0.2}	0.3	80	Diagonal nine hole 9/row	1.08	200	9	100

M 微喷灌系列

Micro spray irrigation

PE输水带 Micro spray tape

产品介绍 Introduction

PE输水带，又叫PE水带，软带，主要用于滴灌主管，支管管道，柔韧性好，使用寿命长，抗紫外线，耐腐蚀，安装使用及回收方便，可以反复使用

PE water delivery belt, also known as PE water belt, soft belt, is mainly used for drip irrigation main pipes, branch pipes, good flexibility, long service life, UV resistance, corrosion resistance, easy installation, use and recycling, and can be used repeatedly



输水带 (额定工作压力: 0.5mm 壁厚: 0.2MPa; 1.0mm 壁厚: 0.25MPa; 1.0mm以上壁厚: 0.3MPa)			
外径 (mm)	壁厚 (mm)	折径 (mm)	包装规格 (m/件)
φ32 ^{+0.4}	0.5 ^{+0.03}	48 ⁺²	100
	1.0 ^{+0.03}	48 ⁺²	100
φ40 ^{+0.4}	0.5 ^{+0.03}	60 ⁺²	100
	1.0 ^{+0.09}	76 ⁺²	100
φ50 ^{+0.5}	0.5 ^{+0.03}	76 ⁺²	100
	1.0 ^{+0.09}	76 ⁺²	100
	1.5 ^{+0.08}	96 ⁺²	100
φ63 ^{+0.5}	0.5 ^{+0.03}	96 ⁺²	100
	1.0 ^{+0.05}	96 ⁺²	100
	1.2 ^{+0.07}	96 ⁺²	100
	1.5 ^{+0.08}	96 ⁺²	100
φ75 ^{+0.6}	0.5 ^{+0.03}	115 ⁺³	100
	1.0 ^{+0.05}	115 ⁺³	100
	1.2 ^{+0.07}	115 ⁺³	100
	1.5 ^{+0.08}	115 ⁺³	50
φ90 ^{+0.6}	0.5 ^{+0.03}	137 ⁺³	100
	1.0 ^{+0.05}	137 ⁺³	100
	1.2 ^{+0.07}	137 ⁺³	100
	1.5 ^{+0.08}	137 ⁺³	50
φ110 ^{+0.6}	0.5 ^{+0.03}	168 ⁺³	100
	1.0 ^{+0.05}	168 ⁺³	100
	1.2 ^{+0.07}	168 ⁺³	100
	1.5 ^{+0.08}	168 ⁺³	50

人工造雾工程 Artificial fog making project

产品介绍 Introduction

自动喷雾喷药系统，雾化好，喷药效果好，适用于温室大棚内的喷雾喷药，大型果园果树的喷药，同时还可以增加空气中负氧离子的含量，空气新鲜，改善空气质量，提高蔬菜以及果品的产品与质量。此喷雾系统还适用于去除静电，景观造雾，喷雾消毒，工地防尘，垃圾中转站除臭等环境下。

The automatic spraying and spraying system has good atomizing effect and good spray effect. It is suitable for spray spraying in greenhouse. Fruit spray in large orchard can also increase the content of negative oxygen ions in the air, fresh air, improve air quality, and improve the products and quality of vegetables and fruits. The spray system is also suitable for removing static electricity, landscape fog, spray disinfection, site dust control and deodorization of refuse transfer station.



喷头 Metal sprinkler

● 98-1
接口尺寸: 1寸
材料: 锌合金/塑料
喷嘴直径: 7/3.1mm
压力: 3-4Bar
流量: 2.98-3.8m³/h
射程: 17.5-22m



connector size: 1寸
material: zinc alloy
Spray nozzle: 7/3.1mm
working pressure: 3-4Bar
flow rate: 2.98-3.8m³/h
spray radius: 17.5-22m



● 98-2
接口尺寸: G3/4
材料: 锌合金
喷嘴直径: 6.0/3.1mm
压力: 12-3.5Bar
流量: 2.47-3.20m³/h
射程: 13-15.5m



connector size: G3/4
material: zinc alloy
Spray nozzle: 6.0/3.1mm
working pressure: 12-3.5Bar
flow rate: 2.47-3.20m³/h
spray radius: 13-15.5m

● 9708
接口尺寸: G1/2
材料: 镀铜/塑料
喷嘴直径: 4mm
压力: 1.5-3.5Bar
流量: 0.95-1.13m³/h
射程: 8-13m



connector size: G1/2
material: brass
Spray nozzle: 4mm
working pressure: 1.5-3.5Bar
flow rate: 0.95-1.13m³/h
spray radius: 8-13m



移动喷灌系统 Mobile sprinkler irrigation system

大田喷灌分为: 全固定式、半固定式、移动式三种类型。
广泛用于农业、园林、体育场、庭院、高尔夫球场灌溉和工业防尘等。

Field sprinkler style: Fixed, parts fixed, removable. Widely used in field, farm, garden, stadium, courtyard, golf links and industry dust-proof, etc.



过滤器系列

Irrigation filters

反冲洗砂石过滤器 Back-washing sand filter

反冲洗砂石过滤器是由圆柱形的双罐体制成。过滤介质为粒径0.6-1.0mm石英砂和卵石等，改变沙粒粒径可改变过滤精度。双罐体的清水直接反冲洗另一个罐体中的杂质，它是目前过滤器中处理水中的有机杂质和无机杂质最为有效的过滤器，常用于地表水源（河、塘）的过滤。砂石过滤器通常与网式过滤器组合实用。

Back-washing sand filter consist of two tank. Filter medium is diameter 0.6-1.0mm quartz sand and shingle, so the filter fineness will be better. The water from one tank washes another tank' s impurities, this type sand filter is the most effective one to clean up the organic impurities and inorganic impurity, often used in filtration of rivers and pond with steel screen filter.



反冲洗叠片过滤器

叠片过滤器过滤器的核心技术在于采用了盘片式过滤机理：通过互相压紧的表面刻有沟纹的塑料盘片实现了表面过滤与深度过滤的结合；通过巧妙设计的过滤装置实现了过滤、反洗、自动切换，循环往复的工艺过程。

The core technology of the laminated filter filter lies in the adoption of the disc filter mechanism: the combination of surface filtration and depth filtration is realized through the compacted plastic discs with grooves on the surface; the ingenious design of the filter device realizes Filtration, backwashing, automatic switching, and cyclical process.



离心式过滤器+网式过滤器+钢制施肥罐 Centrifugal filter + mesh filter + steel fertilizer tank

离心式过滤器是由高速水流产生的离心力将砂粒和其他较重的杂质从水体中分离出来，主要用于含沙水流的初级过滤。它采用钢板焊接而成，由两部分组成：上部分为离心壳体，下部分为集砂罐。对大于200目的砂粒杂质，分离效果可达95%左右，水头损失在3.5-7.7m范围内。若水流中含有机物或比水轻的杂质，则分离效果很差。在水流不稳定的状态，即开泵与停泵期间由于水流不稳定，则过滤效果不好，因此一般与网式过滤器组合使用。

Centrifugal filter is generated by a high-speed flow centrifugal force, sand and other heavy impurities will separate from the water and sediment-laden flow is mainly used for the primary filtration . It uses a welded steel plate consists of two parts : the upper part of the centrifuge housing , lower part of the tank to deposit sand . Greater than 200 mesh sand impurities, separation efficiency up to 95 % , the head loss in the range of 3.5-7.7m . If water containing organic or impurities lighter than water , the separation is bad . Unstable state in water , which means that the pump and the pump stops during the flow instability , the filter effect is not good , it is generally used in combination with the screen filter .

F 过滤施肥系统 Fertilizer Device

网式过滤器 Screen filter

网式过滤器是由钢管或工程塑料制成的壳体和不锈钢筛网制成。结构简单，安装方便，它是灌溉系统中应用最广泛的一种过滤器。它用于处理水体中的无机杂质最为有效。当水流通过滤网时，大于滤网孔眼的杂质将被拦截下来。随着滤网上粘附的杂质增多，通过的水压下降，通过手动和自动清洗装置将粘附筛网上的杂质清除掉，过滤器才能恢复正常工作。在水质较差的水源过滤系统中，常用砂石-网式组合或者离心-网式组合实用。

Screen filter is made of steel pipe and engineering plastics case and stainless steel mesh. Simple structure , easy installation, it is the most widely used in irrigation systems as a filter. It is the most effective way to clean up the inorganic impurities in water. When the water passes through the filter, the impurity which is larger than the filter hole will be blocked off . As the adhesion of impurities on the filter increases , the pressure will drop, and we need to use manual and automatic cleaning device to remove impurities off , the filter can resume normal operation . Poor water quality water filtration system , commonly used sand-screen filter combination or centrifugal- screen filter combination to get better performance.

叠片式过滤器 Disc filter



叠片式过滤器是由很薄的叠片重叠成圆柱形滤芯，每个圆形叠片两个面中一面分布许多S形沟槽。另一面为同心环形沟槽，改变沟槽的尺寸即可得到不同的过滤精度，一般在40-400目之间。

叠片式过滤器正常工作时，叠片是被锁紧的，当要手动冲洗时，拆下滤网，松开压紧螺母即可用水冲洗。

叠片式过滤器比网式过滤器存留杂质的能力强，因而冲洗次数相对较少。适用于处理水源中无机杂质和过滤精度要求较高的灌溉系统中。

Disc filter is made of thin discs overlap into a cylindrical filter, one side of the disc is filled with many S-shaped grooves. The other side of concentric annular groove, to change the size of the groove can get different filtration , generally between 40-400 mesh.

Disc filter normal working hours , discs is locked, when you want to manually flushing , remove the filter, loosen the clamp nut flush .

Disc filter than the screen filter retention ability of impurities , and therefore relatively small flushes. Applies to the handling of inorganic impurities in water and filtering high precision irrigation systems.



施肥原理：（以施肥罐为例）本装置是由专用施肥阀、施肥罐及连接管组成，是根据压差的原理进行施肥的。首先将稀释过的无机肥料装入罐内，调节施肥专用阀，使之形成一定的压力差，开启施肥专用阀的两个调节阀，将罐内的肥料压入灌溉系统中进行施肥。

Fertilization principles : (in fertilizer tank for example) This device is composed of special fertilizer valve, fertilizer tank and connecting pipe, which is based on the principle of differential fertilization . First, pour the diluted inorganic fertilizer into the tank , regulating fertilization special valves, so that' ll form a certain pressure difference, open the two control valves of the fertilize valve, the pressure will force the liquid fertilizer from the tank to irrigation systems .

特点：该装置操作简便、施肥均匀、可使肥料直接作用于作物根部，提高肥效，减少浪费，省时，省力、定量。既可集中施肥，也可分散施肥。本施肥装置适用于滴灌工程中，微喷、大田喷灌只限于喷洒叶面肥、农药等。

Features:The device is easy to operate,fertilizing evenly,make fertilizer directly on the roots of crops ,improve efficiency,saving time and labor,quantitative.Concentrated fertilizer can also be dispersed fertilization.This device is suitable for drip irrigation fertilizing project, and foliar fertilizer, pesticides in micro spray irrigation, field sprinkling irrigation.



PVC管材系列

PVC pipe fittings



- ◆ 质轻, 搬运装卸便利
light weight, carry, load and unload convenient
- ◆ 耐腐蚀性、药品性良好
Excellent corrosion and chemical resistance
- ◆ 流体阻力小 Fluid resistance
- ◆ 机械强度大 Mechanical strength
- ◆ 电器绝缘性佳 Good electrical insulation
- ◆ 不影响水质 Does not affect the water quality
- ◆ 具有良好的水密性 Good watertightness
- ◆ 施工简易 Simple construction

GBT13664-2006



PVC-U给水管材规格尺寸

PVC-U water supply pipe specifications & dimension

公称外径(mm) Nominal outside diameters	20°C许可操作压力(Mpa) normal working pressure	壁厚(mm) wall thickness	
		公称壁厚 nominal wall thickness	允许公差 tolerance
20	2.0	2.0	0.4
25	1.6	2.0	0.4
32	1.25	2.0	0.4
40	1.0	2.0	0.4
50	0.8	2.0	0.4
	1.0	2.4	0.5
63	0.6	2.0	0.4
	0.8	2.5	0.5
75	1.0	3.0	0.6
	0.6	2.3	0.5
90	0.8	2.9	0.5
	1.0	3.6	0.6
110	0.6	2.8	0.5
	0.8	3.5	0.6
125	1.0	4.3	0.7
	0.6	2.7	0.5
160	0.8	3.4	0.6
	1.0	4.2	0.7
200	0.6	3.1	0.6
	0.8	3.9	0.7
250	1.0	4.8	0.8
	0.6	4.0	0.7
315	0.8	4.9	0.8
	1.0	6.2	1.0
400	0.6	4.9	0.8
	0.8	6.2	1.0
500	1.0	7.7	1.2
	0.6	6.2	1.0
630	0.8	7.7	1.2
	1.0	9.6	1.5
800	0.6	7.7	1.2
	0.8	9.7	1.5
1000	1.0	12.1	1.9
	0.6	9.8	1.2
1200	0.8	12.3	1.5
	1.0	15.3	1.8

PVC管件



PE管材系列

PE pipe

PE 直管 PE pipe

PE 直管广泛用于农业、自来水等工程; PE微灌管材具有抗老化, 使用寿命长等特点, 广泛用于喷灌、滴灌等节水工程。

PE hose widely used in agriculture, water and other projects; PE micro-irrigation pipe with anti-aging, long life and other characteristics, widely used in irrigation, drip irrigation and other water-saving projects.

PE 外径管规格表 PE pipe OD Specifications

序号 NO.	规格 specification	壁厚 wall thickness	比重(m/kg) specific gravity
1	Φ16	1.0+0.2	20
2	Φ20	1.6+0.4	9.5
3	Φ25	2.0+0.4	6.5
4	Φ32	2.2+0.5	4.5
5	Φ40	2.6+0.5	3
6	Φ50	3.2+0.5	2
7	Φ63	3.8+0.6	1.3
8	Φ75	4.6+0.7	0.9
9	Φ90	5.3+0.8	0.7

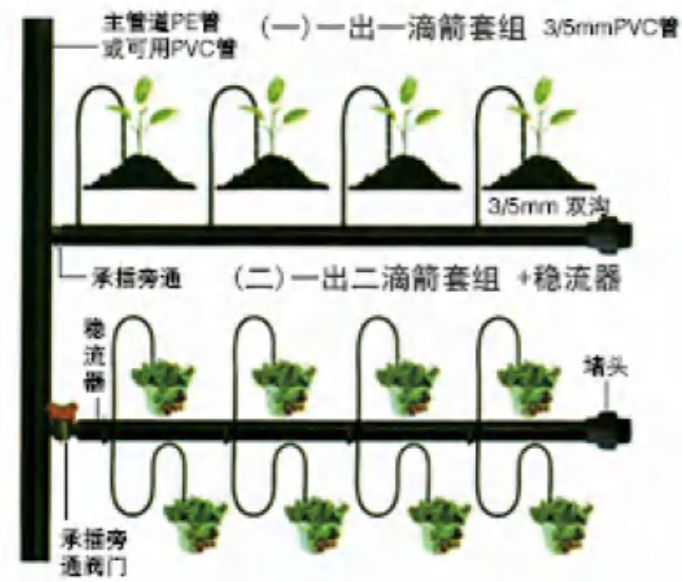


PE 100给水管规格表 PE 100 OD Specifications

公称外径 (mm) nominal outside diameters	公称压力 (PN, MPa) nominal pressure				
	0.6	0.8	1.0	1.25	1.6
	公称壁厚 nominal wall thickness	公称壁厚 nominal wall thickness	公称壁厚 nominal wall thickness	公称壁厚 nominal wall thickness	公称壁厚 nominal wall thickness
50					4.6
63				4.7	5.8
75			4.5	5.6	6.8
90		4.3	5.4	6.7	8.2
110	4.2	5.3	6.6	8.1	10.0
125	4.8	6.0	7.4	9.2	11.4
140	5.4	6.7	8.3	10.3	12.7
160	6.2	7.7	9.5	11.8	14.6
180	6.9	8.6	10.7	13.3	16.4
200	7.7	9.6	11.9	14.7	18.2
225	8.6	10.8	13.4	16.6	20.5
250	9.6	11.9	14.8	18.4	22.7
280	10.7	13.4	16.6	20.6	25.4
315	12.1	15.0	18.7	23.2	28.6
355	13.6	16.9	21.1	26.1	32.2
400	15.3	19.1	23.7	29.4	36.3



滴箭 Arrow drip



滴灌作为一种新型的灌溉技术，从诞生之日起，已经发展了近一个世纪，在缺水严重的国家和地区，其节水能力表现得尤为突出。

滴灌是一种高效的节水灌溉技术，它利用管道系统供水，使灌溉水将作物的根系浸泡在水滴中，缓慢、均匀、定量地定时，使CRP根区土壤始终保持最佳水分状态。

Form its birth, drip irrigation has been in development for nearly a century. As a kind of new irrigation technology, it revealed an unprecedented water conservation capacity, especially in the countries and areas of serious water shortage.

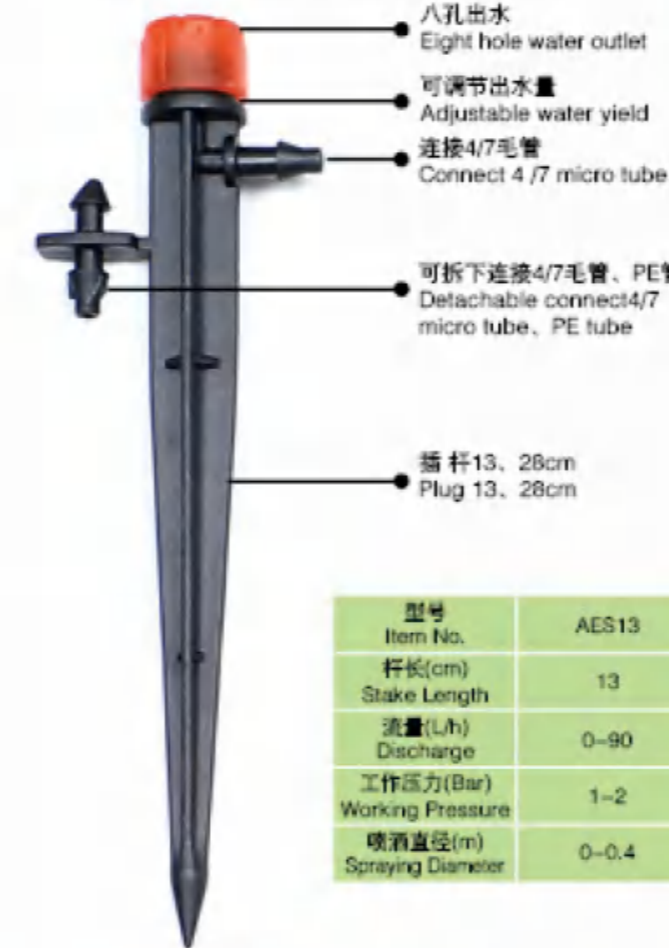
Drip irrigation is a kind of high efficiency water conservation irrigation technology. It uses the pipeline system to supply water, makes irrigation water soak the root of the crop in droplets, slowly, uniformly and timing quantitatively and make crop root zone soil always kept in optimum moisture condition.

涡旋插尖喷头 Vortex spigot nozzle

插尖喷头 Micro Sprinkler



八孔喷头 Eight-Hole Sprinkler on Stake



型号 Item No.	AES13	AES28
杆长(cm) Stake Length	13	28
流量(L/h) Discharge	0-90	0-9
工作压力(Bar) Working Pressure	1-2	1-2
喷洒直径(m) Spraying Diameter	0-0.4	0-0.4

涡旋喷头 Turbo Sprinkler on Stake



型号 Item No.	ATS13	ATS28
杆长(cm) Stake Length	13	28
流量(L/h) Discharge	0-90	0-9
工作压力(Bar) Working Pressure	1-2	1-2
喷洒直径(m) Spraying Diameter	0-3	0-3



SMART AGRICULTURE BIG DATA PLATFORM

IoT new technology, intelligent new agriculture
make agriculture increasingly simple

This platform can carry out real-time monitoring of agricultural production, use complete Internet technology to achieve real-time monitoring and control of agricultural production, and make appropriate adjustments to agricultural production according to the specific situation. It can enable operators to grasp the information of production materials in a timely manner. The platform data is accurate and highly efficient. The intelligent industry supported by Internet of Things technology, through platform resource sharing, technological means, and system integration, can ultimately achieve optimal production methods, and accurate information data is also an advantage of smart agriculture. Information integration transmission and control, one machine in hand, worry free agriculture.



PE 外接管件系列 PE pipe fittings

我们为客户提供的是外径20 - 63毫米专用PE管件，采用优质原料生产，耐腐蚀性和抗紫外线能力强。我们测试这些配件上的各种质量参数，以确保在工作压力下正常使用。PE管件类型：直接，异径直接，内（外）丝接头，三通，异径三通，弯头，堵头，等等。

on various quality parameters to ensure a flawless range. The compression fittings contain various types such as: Coupling, Reducing Coupling, Adaptor, Tee, Reducing Tee, Elbow, End Cap, and so on.

The compression fittings we offer our clients are designed specifically for connecting PE pipes with outside diameter of 20 - 63mm, they are produced from quality raw material, which makes these fittings resistant to etching by numerous chemical substances and to UV-rays. We test these fittings

产品图片 Picture	产品名称 Name	规格 Diameter
	直接 compression coupling	Φ20
		Φ25
		Φ32
		Φ40
		Φ50
		Φ63
	弯头 compression elbow	Φ20
		Φ25
		Φ32
		Φ40
		Φ50
		Φ63
	内丝直接 female adaptor	Φ20 × 1/2'
		Φ25 × 3/4'
		Φ32 × 1'
		Φ40 × 1.2'
		Φ50 × 1.5'
		Φ63 × 2'

	正三通 compression tee	Φ20
		Φ25
		Φ32
		Φ40
		Φ50
		Φ63
	堵头 compression end plug	Φ20
		Φ25
		Φ32
		Φ40
		Φ50
		Φ63
	外丝直接 male adaptor	Φ20 × 1/2'
		Φ25 × 3/4'
		Φ32 × 1'
		Φ40 × 1.2'
		Φ50 × 1.5'
		Φ63 × 2'

There are many types and specifications, please consult customer service personnel for details.

PE 外接管件系列

PE pipe fittings

产品图片 Picture	产品名称 Name	规格 Diameter
	变径接头 compression reducing coupling	Φ25 × 20 Φ32 × 20 Φ32 × 25 Φ40 × 20 Φ40 × 25 Φ40 × 32 Φ50 × 20 Φ50 × 25 Φ50 × 32 Φ50 × 40 Φ63 × 20 Φ63 × 25 Φ63 × 32 Φ63 × 40 Φ63 × 50
	变径三通 compression reducing tee	Φ25 × 20 Φ32 × 20 Φ40 × 20 Φ40 × 25 Φ40 × 32 Φ50 × 20 Φ50 × 25 Φ50 × 32 Φ50 × 40 Φ63 × 20 Φ63 × 25 Φ63 × 32 Φ63 × 40 Φ63 × 50
	排气阀 air valve	Φ25 Φ32 Φ40 Φ50 Φ63
	取水栓 faucet	Φ25 Φ32
	内镶管 直接 drip pipe coupling	Φ15
	PE旁通 PE bypass	Φ16
	PE旁通阀 PE bypass valve	Φ16 Φ20
	直插正三通 barb tee	Φ16 Φ20
	内插直接 barb coupling	Φ16 Φ20 Φ25 Φ32
	直插式变径 reducing barb coupling	Φ20 × 16
	八字堵头 "8" style end plug	Φ16 Φ20

There are many types and specifications, please consult customer service personnel for details.

产品图片 Picture	产品名称 Name	规格 Diameter
	鞍座 Saddle	Φ20 × 20 Φ25 × 20 Φ25 × 25 Φ32 × 20 Φ32 × 25 Φ32 × 32 Φ40 × 20 Φ40 × 25 Φ40 × 32 Φ50 × 20 Φ50 × 25 Φ50 × 32 Φ50 × 40 Φ63 × 20 Φ63 × 25 Φ63 × 32 Φ63 × 40 Φ63 × 50 Φ75 × 20 Φ75 × 25 Φ75 × 32 Φ75 × 40 Φ75 × 50 Φ75 × 63 Φ90 × 20 Φ90 × 25 Φ90 × 32 Φ90 × 40 Φ90 × 50 Φ90 × 63 Φ90 × 75 Φ110 × 20 Φ110 × 25 Φ110 × 32 Φ110 × 40 Φ110 × 50 Φ110 × 63 Φ110 × 75 Φ160 × 20 Φ160 × 32 Φ160 × 75
	Quickly insert the outer thread	Φ20 Φ25 Φ32
	Quick insertion elbow	Φ20 Φ25 Φ32
	Insert the inner wire quickly	Φ20 Φ25 Φ32
	Quick plug in directly	Φ20 Φ25 Φ32
	Quickly plug in the three-way connector	Φ20 Φ25 Φ32
	AK type single lock female bypass valve	Φ16 Φ20
	AK soft belt bypass valve	Φ16
	AK soft belt three-way valve	Φ16
	AK type double lock nut straight through valve	Φ16 Φ20
	Single lock female bypass valve	Φ16 Φ20
	Soft strip water valve	Φ20 Φ25 Φ32 Φ40
	Double lock nut directly	Φ16 Φ20
	Lock nut outer thread valve	Φ16 Φ20

There are many types and specifications, please consult customer service personnel for details.

软带管件系列

Soft hose fittings

产品图片 Picture	产品名称 Name	规格 Diameter
	直接 coupling	Φ90
		Φ75
		Φ63
		Φ50
		Φ40
		Φ32
	弯头 elbow	Φ90
		Φ75
		Φ63
		Φ50
		Φ40
	正三通 tee	Φ90
		Φ75
		Φ63
		Φ50
		Φ40
		Φ32
	外丝直接 male thread coupling	Φ75 × 2.5'
		Φ63 × 2'
		Φ50 × 1.5'
		Φ40 × 1.2'
		Φ32 × 1'
		Φ25 × 6"

	外丝四通 male thread cross	Φ90 × 2.5'
		Φ90 × 2'
		Φ90 × 1.5'
		Φ75 × 2'
		Φ75 × 1.5'
		Φ63 × 1.5'
	内外丝接头 male female thread coupling	Φ1.5' × 1'
		Φ1.5' × 1.2'
	外丝三通 tee with male thread	Φ90 × 2.5'
		Φ90 × 2'
		Φ90 × 1.5'
		Φ75 × 2'
		Φ75 × 1.5'
		Φ75 × 1.2'
		Φ75 × 1'
		Φ63 × 1.5'
		Φ63 × 1.2'
		Φ63 × 1'
Φ50 × 1.2'		
	外丝三通 tee with male thread	Φ50 × 1'
		Φ40 × 1'
		Φ32 × 1'

There are many types and specifications, please consult customer service personnel for details.

产品图片 Picture	产品名称 Name	规格 Diameter
	锁母直接 drip tape loc x coupling	Φ16
	锁母旁通 loc x barb bypass	Φ16
	水带阀门 三通 valve tee	Φ50 × 25
	水带阀门 四通 valve cross	Φ63 × 25
	滴灌带三通 drip tape tee	Φ16
	毛管小接头 small barb coupling	Φ4 Φ5
	软带阀 Soft belt valve	

There are many types and specifications, please consult customer service personnel for details.

	软带三通 Soft belt tee	Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110
	软带四通 Soft belt cross	Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110
	软带弯头 Soft belt elbow	Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110
	软带直接 Soft belt directly	Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110
	软带外丝 Soft outer wire	Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110
	软带外丝 Soft outer wire	Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90 Φ110

H 热熔管件系列

Hot melt pipe fittings

产品图片 Picture	产品名称 Name	规格 Diameter
	热熔球阀 Hot melt ball valve	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	热熔三通 Hot melt tee	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	热熔变径直接 Hot melt path directly	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	热熔内丝 Hot melt inner wire	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	热熔活接 Hot melt joint	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	热熔弯头 Hot melt elbow	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	热熔弯头 Hot melt elbow	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	截止阀 Shut-off valve	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75 Φ90
	哈佛接 Ha Fo Jie	Φ20 Φ25 Φ32 Φ40 Φ50 Φ63 Φ75Φ90

There are many types and specifications, please consult customer service personnel for details.

T 工具及其他

Tools & Accessories

产品图片 Picture	产品名称 Name	规格 Diameter
	PE旁通打孔器 PE pipe hole puncher	Φ8 Φ12 Φ16
	PE小打孔器 PE pipe small hole puncher	Φ4 Φ5
	软带打孔器 soft hose hole puncher	Φ16
	PE管件扳手 PE pipe wrench	Φ32 Φ40-Φ63
	软带小扳手 drip tape fitting wrench	Φ16
	开孔器 Hole opener	针对各种规格鞍座搭配
	发电机 generator	220V
	承插焊机 Socket welder	20-63
	皮带扳手 Belt wrench	
	生料带 Raw strip	
	手电钻 Electric hand drill	

There are many types and specifications, please consult customer service personnel for details.

E 工程案例 Engineering Cases



Miilkiia Agriculture

Email: info@miilkiigrow.com
Website: <https://www.miilkiigrow.com>
Whatsapp & Tel: +86 13905840261



Facebook: Miilkiia Grow
LinkedIn: Miilkiia Agriculture
Instagram: Miilkiia Agriculture
Youtube: Miilkiia Agriculture
TikTok: Miilkiia Agriculture